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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/601,204 | 06/20/2003 | Arshad Suhail Farooqui | 643-003US | 7321 |

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| ART UNIT | PAPER NUMBER |
|---|---|
| 2816 | |

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/601,204 | FAROOQUI, ARSHAD SUHAIL | |
| | Examiner | Art Unit | |
| | Quan Tra | 2816 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-8 and 11-20* is/are pending in the application.

4a) Of the above claim(s) *1-6* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *7, 8, 11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

This office action is in response to the amendment filed 11/18/04. The rejection in previous office action is maintained.

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7, 8 and 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 is misdescriptive, thereby renders the claim indefinite. It is misdescritive to recite "said positive input terminal of said operational amplifier is electrically connected to the output terminal of the bandgap reference voltage generator" and "the drain of said transistor is electrically connected to the negative input terminal of said operational amplifier". In contrast, figure 4 shows the negative terminal of the operational amplifier is coupled to the output the bandgap circuit and the positive terminal of the operational amplifier is coupled to the drain of the transistor.

Claims 8-20 are rejected as including the indefiniteness of claim 7.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 7, 8, 11 and 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Mosinskis et al. (USP 6529653).

As to claim 7, Mosinskis et al. discloses in figure 3 an apparatus comprising: a bandgap reference voltage generator (360) having an output terminal; an operational amplifier (613) having a positive input terminal, a negative input terminal, an: an output terminal, wherein the positive input terminal of operational amplifier is electrically connected to the output terminal of the bandgap reference voltage generator *(noted that figure 3 shows the positive terminal of the amplifier 316 is coupled to the bandgap circuit. However, the negative terminal, instead of the positive terminal, of the amplifier must be coupled to the bandgap circuit in order to maintain the voltage at the drain of transistor M1 to be equal to the bandgap voltage)*; a transistor (M1) having a gate, a source, and a drain, wherein the gate of the transistor is electrically connected to the output of said operational amplifier, and wherein the drain of the transistor is electrically connected to the negative input terminal of said operational amplifier; and a voltage divider (R3, R4) having a input terminal, an output terminal, and a common terminal, wherein the input terminal of the voltage divider is electrically connected to the negative input terminal of the operational amplifier; a startup network (378, 374) having a positive supply terminal and an output terminal, wherein the output terminal of the startup network is electrically connected to the input terminal of the voltage divider; a self-biasing network ( 334, 350, 354, 344) having a positive supply terminal (positive terminal of 334), a common terminal (ground), and an output terminal (output of 354), wherein the positive supply terminal of the Self-biasing network is electrically connected to the output terminal of the startup network, and wherein the common

terminal of the self-biasing network is electrically connected to the common terminal of the voltage divider.

As to claim 8, figure 3 shows that the transistor is a PMOS transistor.

As to claim 11, figure 3 shows that the bandgap voltage reference generator also comprises a bias terminal, and wherein the output terminal of the self-biasing network is electrically connected to the bias terminal of the bandgap voltage reference generator.

As to claim 13, figure 3 it is inherent that the bandgap reference voltage generator further comprises ; positive supply terminal an; a common terminal, and wherein the operational amplifier also comprises a positive supply terminal and a common terminal, and wherein the positive supply terminal of the bandgap reference voltage generator is electrically connected to the positive supply terminal of said operational amplifier, and the common terminal of said bandgap reference voltage generator is electrically connected to the common terminal of the operational amplifier *(the circuits must coupled between power supply and ground in order to operate).*

As to claim 14, figure 3 shows the common terminal of the voltage divider is electrically connected to the common terminal of the operational amplifier *(the operational amplifier must be connected to ground in order to operate).*

As to claim 15, figure 3 shows that the positive supply terminal of the startup network is electrically connected to the positive supply terminal of the operational amplifier *(the amplifier is also has to connect to Vcc in order to operate).*

As to claim 16, figure 3 shows that the source terminal of the transistor is electrically connected to the positive supply terminal of the operational amplifier.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mosinskis et al. (USP 6529563) in view of Connell et al. (USP 6441594).

As to claim 17, Mosinskis et al.'s figure 3 shows all limitations of the claim except for a capacitor coupled between the output of the bandgap reference generator and ground. However, Connell et al.'s figure 2 shows capacitor 126 coupled between an output of a reference voltage generator and ground in order to stabilizing the output voltage. therefore, it would have been obvious to one having ordinary skill in the art to add capacitors respectively coupled to the output of each voltage generator, i.e. the output of the bandgap reference voltage generator, the output of voltage generator (316, M1), and the output of the voltage divider (324, 326) in Mosinskis et al.'s figure 3 for the purpose of stabilizing the output voltage of each voltage generator in figure 3.

As to claim 18, the modified Mosinskis et al.'s figure 3 shows a capacitor coupled between the output of the voltage generator (M1, 316) and ground.

As to claim 19, the modified Mosinskis et al.'s figure 3 shows a capacitor coupled between the output of the output of the voltage divider and ground.

***Allowable Subject Matter***

7. Claims 12 and 20 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 12 would be allowable because the prior art fails to teach or suggest that the operational amplifier comprises a bias terminal, and wherein said output terminal of said self-biasing network is electrically connected to the bias terminal of the operational amplifier.

Claim 20 would be allowable because the prior art fails to teach or suggest a capacitor coupled between the output of the self-biasing network and the common terminal.

***Response to Arguments***

8. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues that "nowhere does Mosinskis teach or suggest, alone or in combination with the other references, what claim 7 recites - namely that the positive supply terminal of said self-biasing network is electrically connected to said output terminal of said startup network". The Examiner respectfully disagrees. Mosinskis et al.'s figure 3 shows the positive supply terminal (+) of the self-biasing network is electrically connected to the output terminal of the startup network via resistor R3.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

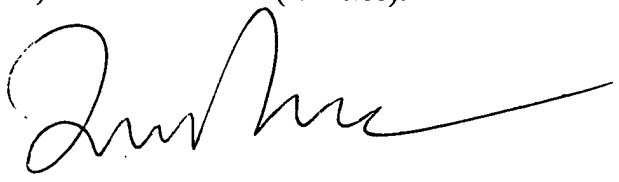
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan Tra whose telephone number is 571-272-1755. The examiner can normally be reached on 8:00 A.M.-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Quan Tra
Primary Examiner

January 4, 2005